Proposed Revisions to the Water Quality Management Planning Regulation (9 VAC 25-720)

Public Meeting – September 17, 2015

Potomac-Shenandoah River Basin (9VAC25-720-50.A)

Tennessee-Big Sandy River Basin (9VAC25-720-90.A)

Chesapeake Bay-Small Coastal-Eastern Shore River Basin (9VAC25-720-110.A)

30-day Public Comment Period:

September 17, 2015 – October 19, 2015

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Presentation Outline

1. Quick Background on terminology/concepts

2. Why we are here

3. Proposed revisions

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Background/Basics

- Water Quality Management Planning Regulation
  - 9 VAC 25-720
  - Organized by river basin
  - Subsection A – watershed wide Waste Load Allocations from TMDL reports

- Waste Load Allocations
  - TMDL equations are part of water quality restoration plans called TMDLs
  - TMDL = WLA + LA +MOS
    - TMDL = Total Maximum Daily Load or the acceptable load of a pollutant
    - WLA = Waste Load Allocation or the acceptable point source load
    - LA = Load Allocation or the acceptable nonpoint source load
    - MOS = Margin of Safety or the built in load not allocated that provides insurance for uncertainties in the estimated TMDL
  - WLAs are part of the Regulation from which permits are issued

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Why We Are Here

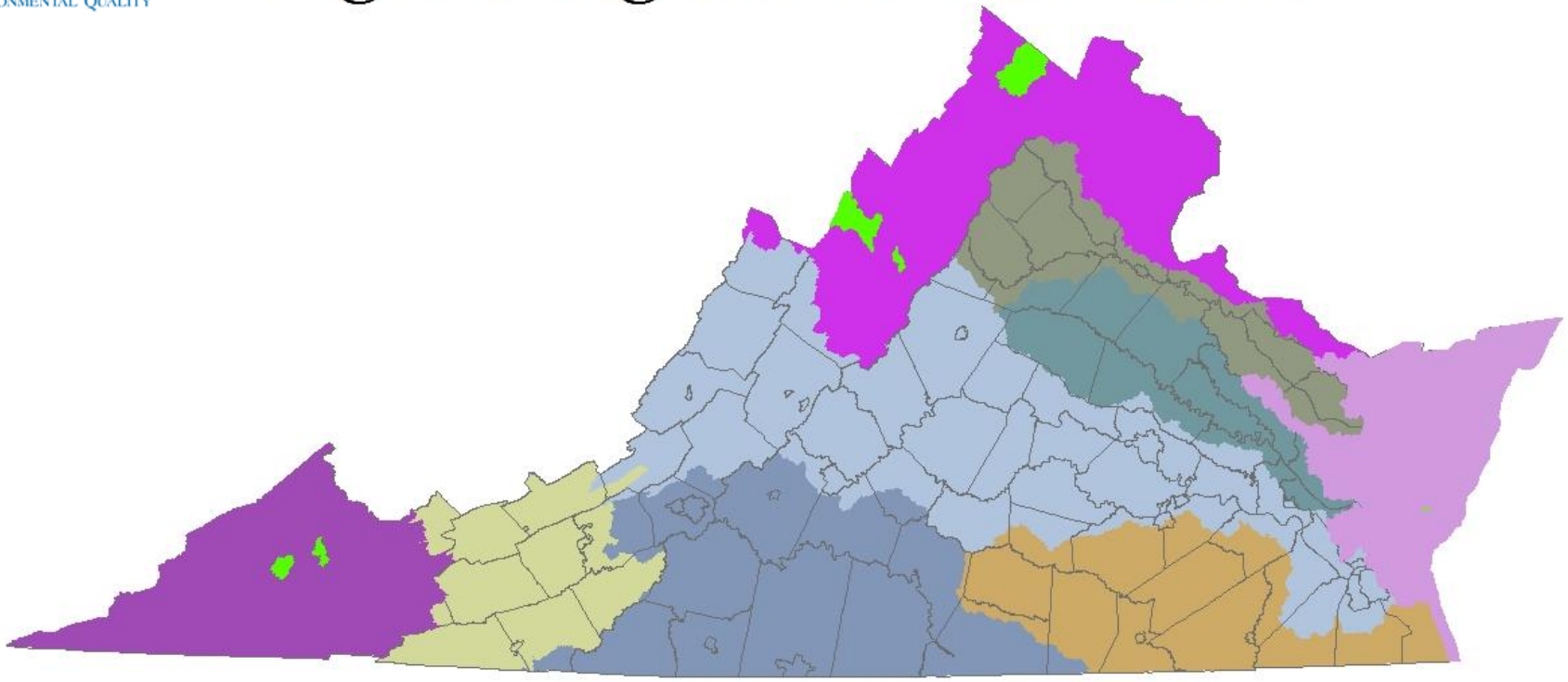
- July 1, 2014 – all WLAs (now including bacteria WLAs) to be included in Regulation

- As part of this exercise 8 existing WLAs in the Regulation were identified as incorrect

- § 2.2-4006.A.14 states:
  - **Waste load allocations** adopted, **amended**, or repealed by the State Water Control Board pursuant to the State Water Control Law, if the Board (i) **provides public notice in the Virginia Register**; (ii) if requested by the public during the initial public notice **30-day comment period**, forms an advisory group composed of relevant stakeholders; (iii) receives and provides summary response to written comments; and (iv) **conducts at least one public meeting**.

- Three affected Regulations:
  - Potomac-Shenandoah River Basin (9VAC25-720-50.A)
  - Tennessee-Big Sandy River Basin (9VAC25-720-90.A)
  - Chesapeake Bay-Small Coastal-Eastern Shore River Basin (9VAC25-720-110.A)

Virginia Regulation River Basins



Affected River Basins

- Chesapeake Bay - Small Coastal - Eastern Shore River Basin
- Potomac-Shenandoah River Basin
- Tennessee - Big Sandy River Basin

Affected Watersheds

Regulation River Basins

- Chesapeake Bay - Small Coastal - Eastern Shore River Basin
- Chowan River - Dismal Swamp River Basin
- James River Basin
- New River Basin
- Potomac-Shenandoah River Basin
- Rappahannock River Basin
- Roanoke River Basin
- Tennessee - Big Sandy River Basin
- York River Basin

Potomac-Shenandoah River Basin (9VAC25-720-50.A)

TMDL #	Stream Name	TMDL Title	City/County	WBID	Pollutant	WLA	Units
1	Muddy Creek, Dry River, and tributaries to North River	Nitrate TMDL Development for Muddy Creek/Dry River, Virginia	Rockingham	B21R, B22R	Nitrate	49,389	lbs/year
9	Mill Creek	TMDL Development for Mill Creek and Pleasant Run	Rockingham	B29R	Phosphorus	116	lbs/year
~~58~~	~~Abrams Creek~~	~~Opequon Watershed TMDLs for Benthic Impairments~~	~~Frederick and Clark~~	~~B09R~~	~~Sediment~~	~~1039~~	~~T/YR~~
~~59~~	~~Lower Opequon~~	~~Opequon Watershed TMDLs for Benthic Impairments~~	~~Frederick and Clark~~	~~B09R~~	~~Sediment~~	~~1039~~	~~T/YR~~

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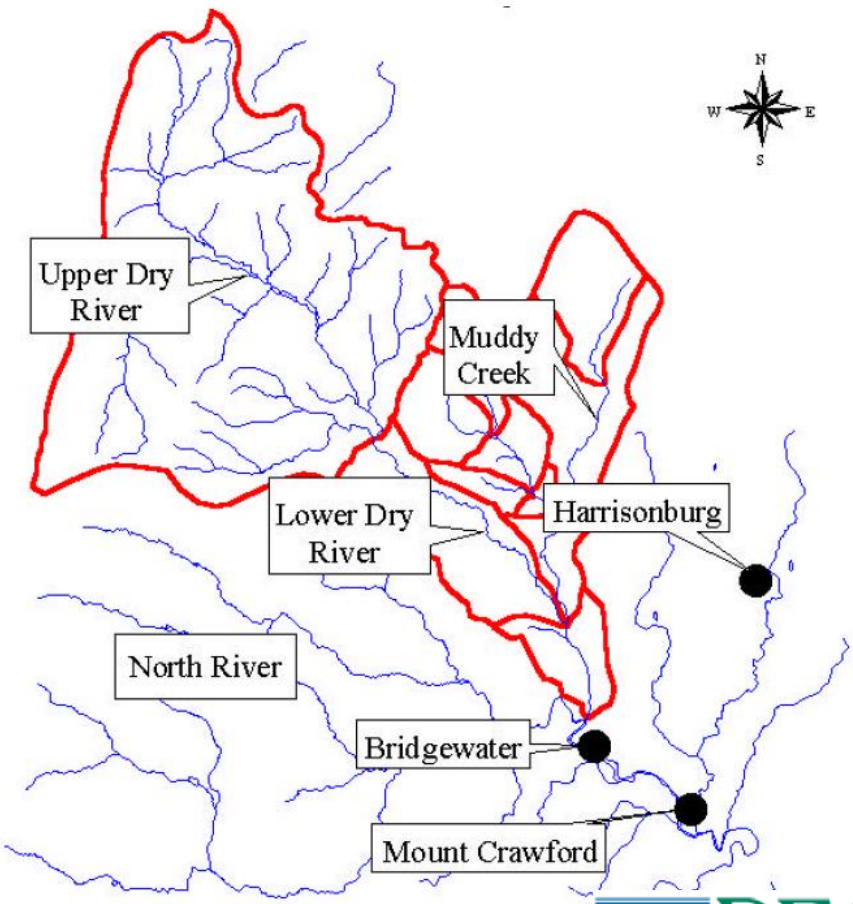
Potomac-Shenandoah River Basin (9VAC25-720-50.A)

- For TMDL #1, proposed changes include a revision of the Stream Name to read "Muddy Creek, Dry River and tributaries to North River," and a revision to the Water Body ID (WBID) to include B22R.
  - Stream Name originally read "Muddy Creek" however since EPA approval, it has applied to Muddy Creek, Dry River, and their tributaries, which all flow into the North River
  - Dry River is in the B22R watershed
  - Muddy Creek is in the B21R watershed



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Potomac-Shenandoah River Basin (9VAC25-720-50.A)

- For TMDL #9, the proposed change includes a revision of the current WLA in regulation to be the EPA approved value from the TMDL report of 116 lbs/year.
  - Currently Mill Creek has a WLA of 138 lbs/year, but that is not what is in the EPA approved TMDL document

Table 6. TMDLs for Mill Creek and Pleasant Run (at the mouth of each stream)

Watershed	Pollutant	TMDL (lbs/yr)	LA (lbs/yr)	WLA (lbs/yr)	MOS (lbs/yr)	Overall % Reduction
Mill Creek	Sediment	6,967,698	6,270,697	231(total) (WLA for each point source = 77)	696,770	45%
	Phosphorus	6,001	5,285	116 (total) (WLA for each point source = 38.7)	600	56%
Pleasant Run	Sediment	4,411,231	3,970,108	0	441,123	71%
	Phosphorus	3,910	3,519	0	391	66%

** Note that the overall % reduction is applied to the TMDL load exclusive of the MOS.*

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~~58.~~	~~Abrams Creek~~	~~Opequon Watershed TMDLs for Benthic Impairments~~	~~Frederick and Clark~~	~~B09R~~	~~Sediment~~	~~1039~~	~~T/YR~~
~~59.~~	~~Lower Opequon~~	~~Opequon Watershed TMDLs for Benthic Impairments~~	~~Frederick and Clark~~	~~B09R~~	~~Sediment~~	~~1039~~	~~T/YR~~

- TM[illegible] res[illegible] 9 be re[illegible]

29.	Abrams Creek	Opequon Watershed TMDLs for Benthic Impairments: Abrams Creek and Lower Opequon Creek, Frederick and Clarke counties, Virginia	Frederick	B09R	Sediment	478	T/YR
30.	Lower Opequon Creek	Opequon Watershed TMDLs for Benthic Impairments: Abrams Creek and Lower Opequon Creek, Frederick and Clarke counties, Virginia	Frederick, Clarke	B09R	Sediment	1,039	T/YR

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Tennessee-Big Sandy River Basin (9VAC25-720-90.A)

TMDL #	Stream Name	TMDL Title	City/County	WBID	Pollutant	WLA	Units
6	Lewis Creek	Total Maximum Daily Load Development for the Lewis Creek Watershed	Russell	P04R	Sediment	21,732	lbs/year
9	Dumps Creek	General Standard Total Maximum Daily Load Development for Dumps Creek, Russell County, Virginia	Russell	P08R	Total Suspended Solids	322,234	kg/year

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Tennessee-Big Sandy River Basin (9VAC25-720-90.A)

- For TMDL #6, the proposed change includes a revision of the current WLA in regulation to be the EPA approved value from the TMDL report of 21,732 lbs/year.
  - Currently the regulation states 40,008 lbs/year

Table 5. TMDL for Lewis Creek

TMDL (lbs/yr)	LA (lbs/yr)	WLA (lbs/yr)	MOS (lbs/yr)	Overall % Reduction
4,247,458	3,800,653	Total = 21,732 *Honaker STP = 18,276* *Harold Keene Coal Company:* *1201497, discharge point 1 = 35.31* *1201497, discharge point 2 = 767.61* *1200614, discharge point 1 = 767.61* *1200614, discharge point 2 = 104.40* *1200614, discharge point 3 = 706.20* *1200614, discharge point 5 = 767.61* *1200614, discharge point 6 = 153.52* *1200614, discharge point 7 = 153.52*	425,072	63.7%

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Tennessee-Big Sandy River Basin (9VAC25-720-90.A)

- For TMDL #9, the proposed change includes a revision of the current WLA in regulation to be the EPA approved value from the TMDL modification of 322,234 kg/year.
  - Was the June 2004 EPA approved value from the original TMDL – 316,523 kg/year
  - Modified in October 2010 because 5 facilities were not included in the original TMDL totaling an additional WLA of 5,711 kg/year

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Chesapeake Bay-Small Coastal-Eastern Shore River Basin (9VAC25-720-110.A)

TMDL #	Stream Name	TMDL Title	City/County	WBID	Pollutant	WLA	Units
3	Mill Creek	Total Maximum Daily Load for Dissolved Oxygen in Mill Creek, Northampton County, VA	Northampton	D06R	Organic Carbon as TC	0.31	lbs/day
4	Mill Creek	Total Maximum Daily Load for Dissolved Oxygen in Mill Creek, Northampton County, VA	Northampton	D06R	Nutrients as TN	0.10	lbs/day

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Chesapeake Bay-Small Coastal-Eastern Shore River Basin (9VAC25-720-110.A)

- For TMDL #3 & #4, the proposed change includes a revision to the current WLAs in regulation to be the EPA approved values from the TMDL report of 0.31 lbs/day and 0.10 lbs/day, respectively.

3.	Mill Creek	Total Maximum Daily Load for Dissolved Oxygen in Mill Creek, Northampton County, Virginia	Northampton	D06R	Organic carbon as TC	30.53	LB/D
4.	Mill Creek	Total Maximum Daily Load for Dissolved Oxygen in Mill Creek, Northampton County, Virginia	Northampton	D06R	Nutrients as TN	10.07	LB/D

Table 4.2: TMDLs and Load Allocation (lb/day)

Nutrient	TMDL	=	LA	+	WLA	+	FA	+	MOS
TOC	30.53	=	28.69	+	N/A	+	0.31	+	1.53
TN	10.07	=	9.47	+	N/A	+	0.10	+	0.50

Where:

TMDL = Total Maximum Daily Load
LA = Load Allocation (Nonpoint Sources)
WLA = Wasteload Allocation (Point Sources)
FA = Future Allocation
MOS = Margin of Safety

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Final Recommended Revisions

WQMPR	TMDL #	Stream Name	TMDL Title	City/County	WBID	Pollutant	WLA	Units
9VAC26-720-50	1	Muddy Creek, Dry River, and **tributaries** to North River	Nitrate TMDL Development for Muddy Creek/Dry River, Virginia	Rockingham	B21R, B22R	Nitrate	49,389	lbs/year
	9	Mill Creek	TMDL Development for Mill Creek and Pleasant Run	Rockingham	B29R	Phosphorus	116	lbs/year
	~~58~~	~~Abrams Creek~~	~~Opequon Watershed TMDLs for Benthic Impairments~~	~~Frederick and Clark~~	~~B09R~~	~~Sediment~~	~~1039~~	~~T/YR~~
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9VAC26-720-90	6	Lewis Creek	Total Maximum Daily Load Development for the Lewis Creek Watershed	Russell	P04R	Sediment	21,732	lbs/year
	9	Dumps Creek	General Standard Total Maximum Daily Load Development for Dumps Creek, Russell County, Virginia	Russell	P08R	Total Suspended Solids	322,234	kg/year
9VAC26-720-110	3	Mill Creek	Total Maximum Daily Load for Dissolved Oxygen in Mill Creek, Northampton County, VA	Northampton	D06R	Organic Carbon as TC	0.31	lbs/day
	4	Mill Creek	Total Maximum Daily Load for Dissolved Oxygen in Mill Creek, Northampton County, VA	Northampton	D06R	Nutrients as TN	0.10	lbs/day

Comments and Questions

- Public Comment Period:
  - September 17, 2015 – October 19, 2015

- To submit comments Contact:

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